IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	Shimek et al.	) Art Unit:	1761
Serial Number	10/620,038	) Examiner:	K. Mahafkey
Filed	July 15, 2003	) Atty Docket:	6126US

For: Soft Dried Marshmallow and Method of Preparation

AFFIDAVIT/DECLARATION SUBMITTED UNDER 37 C.F.R. 1.131

Commissioner For Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

I, James W. Geoffrion, am an inventor in the above-identified U.S. patent application entitled Soft Dried Marshmallow and Method of Preparation which was filed on July 15, 2003 and is owned by General Mills, Inc..

As evidenced by the attached invention record materials, the main invention was conceived at least as early as April 2, 2002 and presented for internal company patent consideration on August 7, 2002. In addition, the invention was reduced to practice by the mid April 2002 and was, in fact, slated for a consumer test on August 6, 2002 as also evidenced by the attached invention record materials.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under *section 1001 of title*

18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: 1/14/2008

James W. Geoffrion

Batches 33-44

PRODUCT DEVELOPER'S NAME: Andrew Peterson DATE/EXP. NO (9)

PROJECT NAME Chewy Marbits TEST LOCATION W16

BACKGROUND:
Glycerin gives a soft chewiness to marbits but may give too much stickiness and toothpack. Fat water cleaner - eating) marbits.

PURPOSE/OBJECTIVE: Combine best levels of fat and glycerin.

PROCEDURE: Make slurries of different glycerin levels. Boil to 250°F. (See explanation) Foam in mondomixer and inject oil. Pass through static mixer.

OBSERVATIONS/CONCLUSIONS: Good combination' many promising samples.
Oil does seem to leak out a bit.

NEXT STEPS: Try to emulsify the fat.
Talk to Jim Langley for advice.

SIGNATURE: Andrew Peterson DATE:

BATCH SHEET

Product: Marbits *Batch:* 33 - 44
Date: 4/17/02 *Purpose:* Adding fat & glycerin
Requestor: A. Peterson See next page.

Base Slurry: **Size:** **25** 11340

Code	Name	%	lb	g
	Sugar Slurry	93.95	23.49	10653.93
	Hydrated Gelatin	6.05	1.51	686.07
TOTAL		100.00	25.00	11340.00

Sugar Slurry: **Size:** **23.4875** 10653.93

Code	Name	%	lb	g
20-4176	EFG Sugar	57.91	13.60	6170.00
20-4030	Corn Syrup 42DE	12.09	2.84	1288.49
20-4040	Dextrose	11.47	2.69	1222.22
20-1000	Water	18.52	4.35	1973.22
TOTAL		100.00	23.49	10653.93

Hydrated Gelatin: **Size:** **1.51** 686.07

Code	Name	%	lb	g
20-3800	Gelatin #10 (pork)	32.82	0.50	225.19

Plan

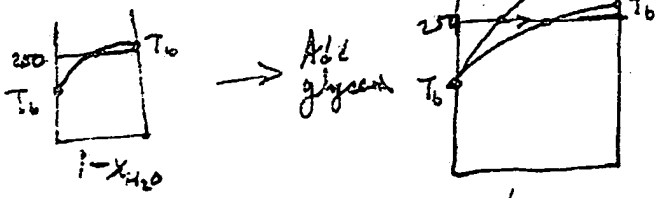
	ml/total		ml/g foam base	
Best fat level:	51ml/216g	0.236111	51/(216-51)	0.309091
Best glycerin level:	10%			

		glycerin		
	ml/g bas	6.7%	10%	15%
	0	37	33	41
	0.2061	40	34	42
Fat	0.3091	39	35	43
	0.4636	38	36	44

- Add glycerin directly to slurry prior to boiling. Boil to 250°F.

Theory:

Phase Diagram



We get a more concentrated slurry from glycerin boiling point reduction.

Analytical:

37 slurry: 11.8% 33 slurry 12.2%

41 slurry: 14.7%

Obviously didn't work.

- Add oil in-line post aerator. Run through 2 static mixers.

Sample	Dry time	Moisture	aw
33-60	60	3.07%	0.171
34-60	60	1.16%	0.101
35-60	60	1.56%	0.114
36-60	60	1.87%	0.131
37-60	60	8.03%	0.138
38-60	60	5.88%	0.136
39-60	60	4.99%	0.154
40-60	60	5.67%	0.13
41-60	60	12.90%	0.154
42-60	60	12.30%	0.14
43-60	60	4.40%	0.162
44-60	60	3.20%	0.134

GENERAL MILLS, INC.

INTRA-COMPANY CORRESPONDENCE

To	Andy Peterson	At	JFB		
	Jim Geoffrion		JFB		
	Bernhard VanLengerich		JFB		
	Phil Zietlow		JFB		
From	Lance Sanders	At	JFB	Date	08/7//2002

Subject **Invention Record No. 6126**

Title: SOFT AND CHEWY MARBITS

This memo will acknowledge receipt of the above Invention Record, which has been given the indicated Invention Record docket number and has been assigned to **John O'Toole.**

The Invention Record will be processed in the usual manner and **Global Cereal Patent Review Board** meeting. At the Board meeting the next steps for the Invention Record will be determined, inventors will be invited to the Board meeting.

To be patentable, an invention must have "novelty." Generally, to be novel, a new invention must not already be in the public domain. Inventions generally are placed in the public domain either through third parties or by the inventor who might have commercially used, shown, or disclosed the invention to third parties (i.e. consumer test, concept test, vendor, advertising agency, product sale). In the U.S. a patent application must be filed within one year of the invention being placed in the public domain. In most countries a grace period does not exist, hence once the invention is placed in the public domain patent rights in those countries are lost immediately. If you know this invention has been or will be placed in the public domain, please notify Lance Sanders.

If you have any questions, please feel free to contact Lance Sanders or the attorney listed above. Please refer to the Invention Record docket number in future correspondence.

cc:	Law Department	MGO
	Mark Widner	JFB
	Danny Strickland	JFB
	Peter Erickson	JFB

LTS/ch
Attachments

INVENTION RECORD **General Mills, Inc. and Affiliated Companies**

This form is for the reporting of any new thing which might be patentable. This form will be reviewed by the JFB Patent Liaison (Annette Frawley, JFBTC -- 2014, 612-764-4158), who will review it and assign a permanent case number. It is not a request for, or authorization of, any patent work. Its purpose is to direct attention to and make a record of new discoveries. The Patent Section (or Patent Administrator) will acknowledge receipt of this form.

INVENTION RECORD CASE NBR: **6126**

TITLE: **Soft and Chewy Marbits**

CATEGORY: **Cereal/Grain Snack Base Technology**

INVENTION TYPE:
A product formulation or a composition

DESCRIPTION OF SUBJECT MATTER

A range of marbits (marshmallow bits) that stay soft and/or chewy in cereal. Standard marshmallows will transfer moisture to cereal pieces--causing staling of the marshmallows and/or sogginess of the cereal pieces. These marshmallows are soft or chewy at the low water activity (~.25) of cereal.

1. Advantages over previous practices in this field
It provides marbits with a texture similar to real marshmallows--not previously possible at the water activity of cereal (aw ~ .25).

2. Detailed description of the invention.
These marbits are based on our standard marbit foam, but have functional ingredients added to modify the texture and keep those properties at low water activities. The classes of functional ingredients used are:

1. Humectants - lower the water activity and increase moisture retention in low water activity formulas.
2. Plasticizers - soften marbits similar to water without evaporating.
3. Lubricants - give a delicateness to the product and reduce toothpack.

Examples of functional ingredients and their range of use levels in these categories:

1. Glycerol (3-10% of formula), Fructose (25-100% of sugars), Sorbitol (~10% of formula), Propylene Glycol (~10% of formula)
2. Glycerol (up to 10% of formula)
3. Soy oil (up to ~30% of formula), Shortening (similar level as oil) (with and without emulsification)

Glycerol works particularly well because of its dual role as humectant and plasicizer.

The humectants and plasticizers are added to the final slurry prior to aeration of the marbit. The oils cannot be added prior to aeration as they will interfere with the gelatin's ability to

foam. Oils are instead injected inline after aeration and mixed in via a static mixer. Marbits that have softness, chewiness, etc.

3. Variants or equivalents.
Described in earlier section.

4. Has this subject matter been made available in any way to persons outside of the Company?
1. By submission of samples? Or consumer test? **Yes**
   Note consumer test has not yet occurred but will occur next Tuesday, August 6, 2002 in an employee's kids panel.
2. By printed publication? **No**
3. Via Tradeshows, Technical Seminars or Conferences **No**
4. By discussions with third party sources **No**
5. By other written or verbal disclosures **No**

5. Has the thing or idea which you have described in this record been?
1. Tried experimentally? **No**
2. Used in Company operations? **No**
3. Sold or offered for sale? **No**

Divisional Marketing Research Contact:

6. When did the described subject matter first occur to you? Or to the originator, if you are not the originator? **April 2, 2002**
7. First disclosure information: **At 4/2 meeting between Jim Geoffrion, Bernhard Van Lengerich, Phil Zietlow, and myself. Various approaches were discussed prior to experimentation.**

8. On what Company projects and/or outside contracts were you working when this subject matter was: **None**

9. Prior Art:
a) Known Patents: **No**
b) Patent Applications: **No**
c) Company Literature: **No**
c) Other corporation R&D: **No**
d) Competitive products: **No**
e) University R&D: **No**
f) Foreign R&D: **No**
g) Prior Invention Records: **No**
h) Product(s) that the invention was developed for:

Inventor's names and Phone numbers will appear below after a Docket Number is assigned.

Inventor Name	Phone	Department	CitizenShip/Company
Andy Peterson	763-764-2124	Extrusion 1	U.S.
andrew.peterson@genmills.com		U.S.	
jim.geoffrion@genmills.com		U.S.	
bernhard.vanlengerich@genmills.com		U.S.	

andrew.peterson@genmills.com; jim.geoffrion@genmills.com; bernhard.vanlengerich@genmills.com; phil.zietlow@genmills.com

---

General Mills, Inc. C O N F I D E N T I A L

WITNESSES:I(We) are not co-inventors and I(We) am(are) technically qualified to understand the subject matter. I (We) have read this invention record (including the attached pages, if attached) and understand it's subject matter.

Signature: Carrie J. Harms Date: 7/31/02
Signature: Lance T. Sanders Date: 8/1/2002

General Mills, Inc. C O N F I D E N T I A L

CONFIDENTIAL

RECEIVED
JUL 3 1 2002
GENERAL MILLS INC
JFB TECHNICAL CENTER